

## EAST Search History

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	0	204/426.ccls. and (lean near10 cathodic) AND (rich NEAR10 anodic)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/17 08:44
S2	4	204/426.ccls. and (lean near10 cathodic) AND (rich NEAR10 anodic)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/17 08:44
S3	9	204/426.ccls. and ((revers\$3 NEAR10 polarity) NEAR10 pump)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/17 09:06
S4	8	("4601809"   "4718999"   "4803866"   "5672811"   "5686654").PN. OR ("6301951").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/09/17 09:41
S5	11	("4601809"   "4718999"   "4722779"   "4803866"   "5211154"   "5672811"   "5686654"   "6136170").PN. OR ("6301951"   "6818111").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/09/17 10:10
S6	9	("4601809"   "4718999"   "4722779"   "4803866"   "5211154"   "5672811"   "5686654"   "6136170").PN. OR ("6301951"   "6818111").URPN. and frequency	US-PGPUB; USPAT; USOCR	OR	OFF	2008/09/17 10:11
S7	17	("4601809"   "4718999"   "4722779"   "4803866"   "5211154"   "5672811"   "5686654"   "6136170").PN. OR ("6301951"   "6818111").URPN. and frequency	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/17 10:11
S8	2	((("4601809"   "4718999"   "4722779"   "4803866"   "5211154"   "5672811"   "5686654"   "6136170").PN. OR ("6301951"   "6818111").URPN.) and frequency	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/17 10:12
S9	99	sensor and ((revers\$3 NEAR10 polar \$3) NEAR10 pump) AND (frequency or HZ)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/17 10:49
S10	5	((oxygen OR lambda) NEAR5 sensor) and ((revers\$3 NEAR10 polar \$3) NEAR10 pump) AND (frequency or HZ)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/17 10:49

S11	1	((oxygen OR lambda) NEAR5 sensor) and ((revers\$3 NEAR10 polar\$3) NEAR10 pump) SAME (warm-up or (warm NEAR2 up))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/17 10:54
S12	1	((oxygen OR lambda) NEAR5 sensor) and (((revers\$3 NEAR10 polar\$3) NEAR10 pump) SAME (warm-up or (warm NEAR2 up)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/17 10:54
S13	4	"4601809".pn. or "4803866".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/17 10:55
S14	33	("4075988"   "4088543"   "4279142"   "4450065"   "4484497"   "4498968"   "4505806"   "4505807"   "4532013").PN. OR ("4601809").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/09/17 11:02
S15	1	"4140106".pn.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/09/17 11:36
S16	0	"09382516".app.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/18 08:11
S17	1	"09/382516".app.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/18 08:12
S18	8	("4601809"   "4718999"   "4803866"   "5672811"   "5686654").PN. OR ("6301951").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/09/18 08:12
S19	18	("4440621"   "4753203"   "4909072"   "5089113"   "5236569"   "5476001").PN. OR ("5686654").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/09/18 08:19
S20	5	("4601809"   "4718999"   "4803866"   "5672811"   "5686654").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/09/18 10:09
S21	3	"3,949,551".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 10:42
S22	11	((lean near15 cathod\$3) and (rich NEAR15 anod\$3) SAME pump)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 10:48
S23	18	("4440621"   "4753203"   "4909072"   "5089113"   "5236569"   "5476001").PN. OR ("5686654").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/09/22 10:50
S24	5	((lean near15 cathod\$3) and (rich NEAR15 anod\$3) SAME pump) and ((revers\$3 OR (warm adj up)) NEAR10 lean)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 10:52

S25	1	("2005/0252771").URPN.	USPAT	OR	OFF	2008/09/22 10:59
S26	8	("4601809"   "4718999"   "4803866"   "5672811"   "5686654").PN. OR ("6301951"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/09/22 11:03
S27	0	"136".clas. and ((warm adj up) NEAR10 (reverse NEAR6 polar\$3))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 11:23
S28	0	"136".clas. and ((warm adj up) NEAR10 (reverse same polar\$3))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 11:23
S29	3	((warm adj up) NEAR10 (reverse same polar\$3))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 11:23
S30	1	"123".clas. and ((warm adj up) NEAR10 (reverse same polar\$3))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 11:25
S31	2	"123".clas. and ((warm adj up) same (reverse same polar\$3))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 11:25
S32	226	"123".clas. and (LEAN WITH (warm adj up))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 11:26
S33	0	"123".clas. and ((LEAN WITH (warm adj up)) near10 POLAR\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 11:26
S34	0	"123".clas. and ((LEAN WITH (warm adj up)) near15 POLAR\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 11:26
S35	0	"123".clas. and ((LEAN WITH (warm adj up)) SAME POLAR\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 11:26
S36	213	PUMP AND (REVERS\$5 SAME POLAR \$3) AND LEAN AND (VOLTAGE OR CURRENT)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 11:34
S37	67	PUMP AND (REVERS\$5 SAME POLAR \$3) AND LEAN AND (VOLTAGE OR CURRENT) AND ("123".CLAS. OR "204".CLAS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 11:35

S38	28	(PUMP near2 (CELL OR CURRENT)) AND (REVERS\$5 SAME POLAR\$3) AND LEAN AND (VOLTAGE OR CURRENT) AND ("123".CLAS. OR "204".CLAS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 11:36
S39	315	("123".clas. oR "204".clas.) AND (lean near15 (pulse or polar\$3))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 11:54
S40	27	("123".clas. oR "204".clas.) AND ((lean near15 (pulse or polar\$3)) SAME pump)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 11:55
S41	4	"10116930"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 11:58
S42	1	2005-749808.NRAN.	DERWENT	OR	OFF	2008/09/22 11:59
S43	2	("123".clas. oR "204".clas.) AND ((lean near15 (pulse)) SAME (pump NEAR5 (current or voltage)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 15:46
S44	4	"5137615".pn. or "4990235".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 15:52
S45	4	"10116930"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 15:57
S46	169	(LEAN with (pump NEAR5 (voltage or current))) AND sensor	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 15:58
S47	3	(LEAN with ((pump NEAR5 (voltage or current)) SAME puls\$5)) AND sensor	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 16:10
S48	5662	polarization NEAR2 effect	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 16:15
S49	101	(polarization NEAR2 effect) and ("123".clas. or "204".clas.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 16:15
S50	3	((("fuel-lean" OR LEAN) with ((pump NEAR5 (voltage or current)) SAME puls\$5)) AND sensor	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 16:20

S51	2	((polarization NEAR2 effect) NEAR10 (puls\$6)) and ("123".clas. or "204".clas.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/22 16:25
S52	1	10/510397.app.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2008/09/26 10:56
S53	1	10/510397.app. and short	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2010/03/18 16:41
S54	0	10/510397.app. and "post fuel injection"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2010/06/07 16:59
S55	1	10/510397.app. and "fuel injection"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2010/06/07 16:59
S56	591	(205/781,783.5,784.5.ccls. or 73/114.71,114.72,114.73.ccls. or 204/421-429.ccls.) and exhaust and injection	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2010/06/07 17:04
S57	0	(205/781,783.5,784.5.ccls. or 73/114.71,114.72,114.73.ccls. or 204/421-429.ccls.) and exhaust and injection and (lean near10 cathodic) AND (rich NEAR10 anodic)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2010/06/07 17:04
S58	0	(205/781,783.5,784.5.ccls. or 73/114.71,114.72,114.73.ccls. or 204/421-429.ccls.) and exhaust and injection and (lean same cathodic) AND (rich same anodic)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2010/06/07 17:04
S59	4	(205/781,783.5,784.5.ccls. or 73/114.71,114.72,114.73.ccls. or 204/421-429.ccls.) and exhaust and injection and (rich near6 drift)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2010/06/07 17:05
S60	106	(205/781,783.5,784.5.ccls. or 73/114.71,114.72,114.73.ccls. or 204/421-429.ccls.) and exhaust and ((fuel near5 injection) same lean)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2010/06/07 17:06
S61	97	(205/781,783.5,784.5.ccls. or 73/114.71,114.72,114.73.ccls. or 204/421-429.ccls.) and exhaust and ((fuel near5 injection) near15 (post or after or following))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2010/06/09 16:13
S62	1	10/510397.app.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2010/06/10 10:43
S63	1889	60/276.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2010/06/10 11:04

S64	1090	60/276.ccls. and (fuel near2 injection)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2010/06/10 11:05
S65	14	60/276.ccls. and (secondary near2 fuel near2 injection)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2010/06/10 11:05
S66	910	60/276.ccls. and (fuel near2 injection) and (lean or rich)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2010/06/10 11:08
S67	418	60/276.ccls. and ((fuel near2 injection) SAME (lean or rich))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2010/06/10 11:08
S68	409	60/276.ccls. and ((fuel near2 injection) SAME (lean or rich)) and sensor	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2010/06/10 11:08
S69	16	60/276.ccls. and ((fuel near2 injection) SAME (lean or rich)) and sensor and polar\$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2010/06/10 11:10

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